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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,129	11/21/2003	Eric C. Huffman	71189-1556	1128

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EXAMINER	
MARC, MCDIEUNEL	

ART UNIT	PAPER NUMBER
3661	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/707,129	HUFFMAN ET AL.	
	Examiner	Art Unit	
	McDieunel Marc	3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 May 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11/21/2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-13 are pending.

2. Applicant's arguments with respect to claims 1-3 and 10-13 have been considered but are moot in view of the new ground(s) of rejection.

3. The rejection to claims 1-3 and 10-13 under 35 U.S.C. 102(e) as being anticipated by Bartseh et al. (U.S. Pat. No. 6,459,955) is withdrawn.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-4 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Chmura et al.** (U.S. Pat. No. 7,113,847 B2).

As per claim 1, **Chmura et al.** teaches an autonomously movable home cleaning robot (see fig. 1) comprising:

a base housing (see fig. 1, element 20);

a drive system mounted to said base housing (see all fig. 3), said drive system adapted to autonomously move said base housing on a substantially horizontal surface having boundaries;

a computer processing unit for storing (see all fig. 3, particularly the motors), receiving and transmitting data (see all fig. 1, particularly element 18), said computer processing unit associated with said base housing (see fig. 3, element 74);

a sweeper aperture and a rotary driven brush mounted for rotation in the sweeper aperture for removing debris particles from the surface (see fig. 4, element 54 and 100);

a dust bin in communication with the sweeper aperture for receiving the debris particles removed from the surface (see element 20 of fig. 1, inherently contains dust bin);

a power source connected to said drive system and said computer processing unit whereby said computer processing unit directs horizontal movement of said base housing within the boundaries of the surface to be cleaned based upon input data defining said boundaries (see fig. 4, elements 22 and 70); and a dusting assembly for removing dust from the surface to be cleaned

(see all fig. 4). Chmura et al. does not specifically teach a dust bin mounted to an underside of the base housing for removing dust from the floor.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the vacuum system of Chmura et al., by introducing the underside dust bin instead of having the bin into element 12 of figure 1., this modification would have been a desire feature into Chmura et al., thereby improving the design and the efficiency of the robotic sweeper cleaner with dusting pad.

As per claims 2 and 10-12, **Chmura et al.** teaches an autonomously movable home cleaning robot according (see fig. 1), wherein the dusting assembly comprises a dusting pad for supporting the dusting cloth against the surface to be cleaned and removably mounting a dusting cloth and mounted to the base housing for movement away from the base housing for service of the dusting cloth (see fig. 2, elements 14, and 54); wherein the dust bin is removably mounted to the base housing (see fig. 1, element 20), which being considered as removed from the top.

As per claim 3, **Chmura et al.** teaches an autonomously movable home cleaning robot according (see fig. 1), wherein the dusting pad is removably mounted to the base housing (see fig. 2, wherein element 54 being taken as removable).

As per claim 4, **Chmura et al.** teaches an autonomously movable home cleaning robot according (see fig. 1), wherein the dusting pad is hinged to the base housing for selectively pivoting the dusting pad between a first, opened position away from the underside of the base housing for removal and mounting of the dusting cloth to the dusting pad and a second (see fig. 2, wherein remove of element 54 being taken as opened position), closed position in operative

position with the base housing (see fig. 2, wherein replace/replace of element 54 being taken as closed position).

As per claim 13, **Chmura et al.** teaches an autonomously movable home cleaning robot according (see fig. 1), wherein the base member is programmed to move in a predetermined direction (see fig. 3, element 22), and the sweeper aperture is positioned generally forwardly in the predetermined direction with respect to the dusting assembly in the base housing (see fig. 1, particularly element 14).

Allowable Subject Matter

7. Claims 5-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

9. The prior art of record fail to teach or fairly suggest with an autonomously movable home cleaning robot that further comprising at least one dusting cloth engagement member mounted to an upper surface of the dusting pad for retaining a first portion of the dusting cloth in combination with the other features of claimed invention.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to McDieunel Marc whose telephone number is (571) 272-6964. The examiner can normally be reached on 6:30-5:00 Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

McDieunel Marc
Examiner
Art Unit 3661

Thursday, June 14, 2007
MM

THOMAS BLACK
SUPERVISORY PATENT EXAMINER